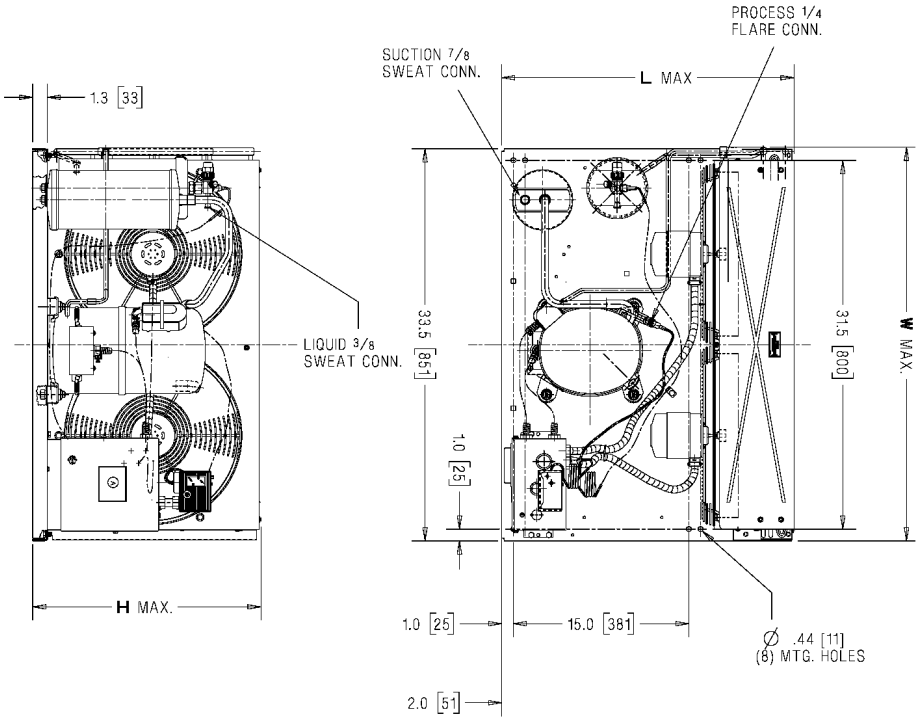
Revision 3- June 11, 2003

Tecumseh Products Company
Hermetic Condensing Units

Model: **AWA9518ZXGXM** **R-404A** **2HP** **AIRCOOLED**



Note: Dimensioning = Inches [mm]

Model	Dimensions, inches				Line Connection*		Pumpdown	Air	Oil Ch	Gr. Wt.
	L	W	H	CH	Suction	Liquid	90 °F 90%	SCFM	cc	Lbs.
AWA9518ZXGXM	25.0	33.48	19.5	14.6	7/8" S	3/8" RS	13.8 lbs	1525	1141	150

* F = Flare, S = Solder, RF or RS = Rotolock with Flare or Solder Connections, C = Compression Fitting
Factory charge: 20 PSIG Nitrogen – **MUST BE EVACUATED**

60 Hz Performance

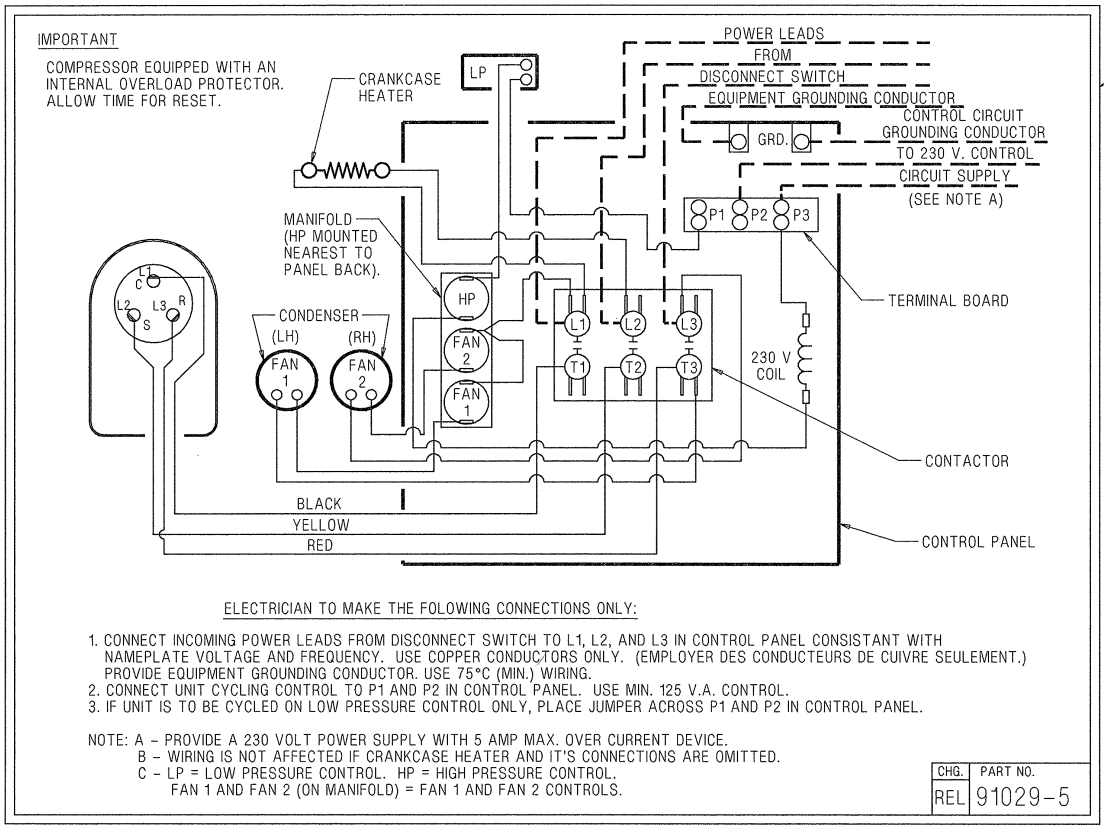
		Ambient Temperatures															
Evaporator		80°F				90°F				100°F				110°F			
T, °F	PSIG	BTUH	Watts	Head	Cond T	BTUH	Watts	Head	Cond T	BTUH	Watts	Head	Cond T	BTUH	Watts	Head	Cond T
-10	23.6	10185	2021	207	90	8659	1970	238	100	7287	1933	271	109	5874	1871	308	119
0	32.6	13115	2269	216	93	11392	2262	248	103	9822	2252	281	112	8221	2223	319	121
5	37.7	14790	2395	222	95	12952	2408	253	104	11255	2410	287	113	9542	2398	325	123
10	43.2	16603	2521	228	96	14642	2553	260	106	12800	2569	293	115	10962	2573	331	124
15	49.1	18556	2648	234	98	16461	2699	266	108	14456	2726	300	116	12480	2747	338	126
20	55.4	20648	2776	241	100	18409	2844	273	109	16224	2883	307	118	14096	2920	345	127
30	69.6	25250	3033	257	104	22694	3135	289	113	20091	3196	323	122	17624	3264	361	130
35	77.2	27760	3163	265	106	25030	3280	298	115	22192	3352	331	124	19536	3435	369	132
40	85.5	30410	3294	274	109	27495	3425	307	117	24403	3507	340	126	21546	3605	378	134
45	94.3	33198	3425	284	111	30090	3570	316	119	26726	3662	350	128	23654	3775	387	136

Return gas temperature 20˚ F max superheat above 20˚ F evaporator,
Below 20˚ F evaporator use 40˚ F return gas. 5˚ F Subcooling

Specifications: AWA9518ZXGXM R-404A 2HP AIRCOOLED

Model	AWA9518ZXGXM
Unit Bill of Material	2C2135-1 AND –9
Nominal Volts-Hz-Ph	460/60/3; 420/50/3
Voltage Range	414 to 506 Volts
Min. Circuit Ampacity	7.9 Amps
Max. Fuse Size (amps)	15 Amps
Compressor Model	AWA9514ZXG
Comp. Bill of Material	AW617TT-125-P2
Compressor RLA/LRA	5.40 / 36.0 Amps
Overload	Internal
Fan Motor (2)	810GO50A49
Fan RLA	0.52 Amps
Fan Blade (2)	51568
Dbl. Fan Shroud	70648-2
Fan Guard (2)	70831

Model	AWA9518ZXGXM
Condenser	50858
Receiver Tank	51081-1
Receiver Tank Valve	31581-1 (3/8” Rotolock Sweat)
Accumulator	TK00042000
Contactor	91014 (30AMP-3PH-230V)
Low Pressure Control	84026-5
High Pressure Switch	84095-2
Fan Switch	84094-1 / 84094-2
Process Valve	31583-1 (1/4” Flare)
Valve O′Ring Gaskets	30334
Crankcase Heater	91022-2
Unit Drawing	SU 1918-6
Electrical Drawing	91029-5
Low Side Design Pressure	181 PSIG
High Side Design Pressure	450 PSIG
Packaging	Single Pack


IMPORTANT
COMPRESSOR EQUIPPED WITH AN INTERNAL OVERLOAD PROTECTOR. ALLOW TIME FOR RESET.
CRANKCASE HEATER
LP
POWER LEADS FROM DISCONNECT SWITCH
EQUIPMENT GROUNDING CONDUCTOR
CONTROL CIRCUIT GROUNDING CONDUCTOR
GRD.
TO 230 V. CONTROL CIRCUIT SUPPLY (SEE NOTE A)
P1 P2 P3
MANIFOLD (HP MOUNTED NEAREST TO PANEL BACK).
TERMINAL BOARD
CONDENSER
(LH) (RH)
HP
FAN 2
FAN 1
FAN 1
FAN 2
L1 L2 L3
T1 T2 T3
230 V COIL
CONTACTOR
BLACK
YELLOW
RED
CONTROL PANEL
ELECTRICIAN TO MAKE THE FOLOWING CONNECTIONS ONLY:
1. CONNECT INCOMING POWER LEADS FROM DISCONNECT SWITCH TO L1, L2, AND L3 IN CONTROL PANEL CONSISTANT WITH NAMEPLATE VOLTAGE AND FREQUENCY. USE COPPER CONDUCTORS ONLY. (EMPLOYER DES CONDUCTEURS DE CUIVRE SEULEMENT.) PROVIDE EQUIPMENT GROUNDING CONDUCTOR. USE 75°C (MIN.) WIRING.
2. CONNECT UNIT CYCLING CONTROL TO P1 AND P2 IN CONTROL PANEL. USE MIN. 125 V.A. CONTROL.
3. IF UNIT IS TO BE CYCLED ON LOW PRESSURE CONTROL ONLY, PLACE JUMPER ACROSS P1 AND P2 IN CONTROL PANEL.
NOTE: A – PROVIDE A 230 VOLT POWER SUPPLY WITH 5 AMP MAX. OVER CURRENT DEVICE.
B – WIRING IS NOT AFFECTED IF CRANKCASE HEATER AND IT'S CONNECTIONS ARE OMITTED.
C – LP = LOW PRESSURE CONTROL. HP = HIGH PRESSURE CONTROL.
FAN 1 AND FAN 2 (ON MANIFOLD) = FAN 1 AND FAN 2 CONTROLS.
CHG. REL
PART NO. 91029-5

S.E.